No. 739,024. PATENTED SEPT. 15, 1903.

I. E. PALMER.

CANOPY SUPPORTING FRAME.

APPLICATION FILED MAY 12, 1903.

NO MODEL.

Fig. 1.

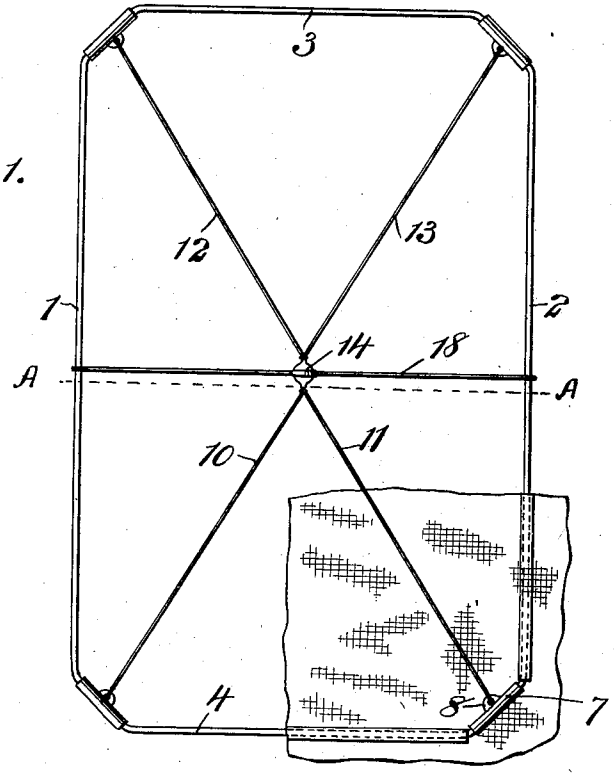


Fig. 2.

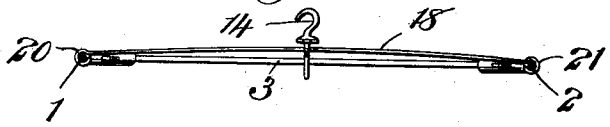


Fig. 3.

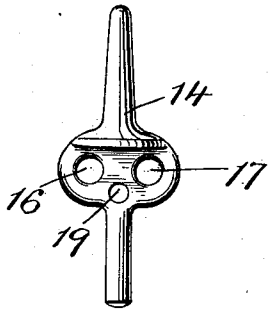


Fig. 4.

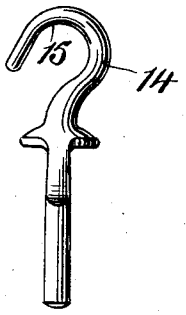
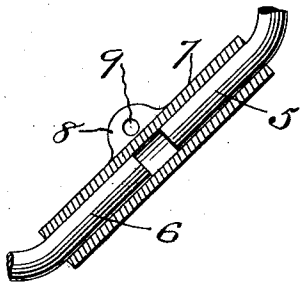


Fig. 5.



Witnesses:-
George Barry Jr.
Henry Thieme

Inventor:
Isaac E. Palmer
By Brown Seward
his Attorneys

No. 739,024. Patented September 15, 1903.

UNITED STATES PATENT OFFICE.

ISAAC E. PALMER, OF MIDDLETOWN, CONNECTICUT.

CANOPY-SUPPORTING FRAME.

SPECIFICATION forming part of Letters Patent No. 739,024, dated September 15, 1903.

Application filed May 12, 1903. Serial No. 156,742. (No model.)

To all whom it may concern:

Be it known that I, ISAAC E. PALMER, a citizen of the United States, and a resident of Middletown, in the county of Middlesex and State of Connecticut, have invented a new and useful Canopy-Supporting Frame, of which the following is a specification.

My invention relates to a canopy-supporting frame intended for use in connection with beds, couches, hammocks, and the like, with the object in view of providing a simple, durable, inexpensive, knockdown frame capable of supporting light and heavy canopies equally well.

A practical embodiment of my invention is represented in the accompanying drawings, in which—

Figure 1 is a top plan view of the canopy-supporting frame, showing the parts in the position which they assume when in use. Fig. 2 is a vertical transverse section through the same in the plane of the line A A of Fig. 1. Fig. 3 is an enlarged view in detail of the hook with the back of the hook toward the observer. Fig. 4 is a similar view with the side of the hook toward the observer; and Fig. 5 is an enlarged sectional view in detail of the corner-socket, showing the position of the two adjacent side and end pieces therein.

The sides of the canopy-support are denoted by 1 and 2 and the ends by 3 and 4. These are preferably made of small metallic rod and may be either solid or tubular. They are commonly made solid and may be for ordinary purposes a heavy stiff wire. The adjacent ends of each side and end are turned at an angle of forty-five degrees, as shown at 5 and 6, Fig. 5, and enter the opposite ends of a tubular corner or socket piece 7. This corner or socket piece 7 is conveniently provided with an ear 8, provided with a perforation 9 for the attachment thereto of one of the supporting-cords. The supporting-cords, four in number, are denoted, respectively, by 10, 11, 12, and 13. They lead, respectively, from the ears on the corner-pieces to the central supporting-hook, (denoted as a whole by 14.) This supporting-hook 14 is provided with a support-hook proper (denoted by 15) located at its upper end, and its shank is flattened out and provided with eyes 16 and 17, directed toward the opposite ends of the supporting-frame—for example, the eye 16 directed toward the end 3 and the eye 17 toward the end 4. The supporting-cords 10 and 11 will lead from the respective corner-pieces at the opposite ends of the end piece 4 to the eye 17, while the cords 12 and 13 will lead from the socket-pieces of the end piece 3 to the eye 16.

In using the word "cord" with respect to the parts 10, 11, 12, and 13 I wish to be understood as including any suitable flexible device—such, for example, as wire, cord, or chain. To further support the sides 1 and 2 and prevent them from unduly bending under the weight of the canopy, I provide a cross-bar 18, which extends through a perforation 19 in the shank of the supporting-hook 14, rendering freely therethrough, while its opposite ends embrace, by means of eyes 20 and 21, the side pieces 1 and 2 of the frame. The connection of the cross-bar 18 with the sides is such that when the corner-pieces are removed to knock down the frame the brace 18 may be slid along the one or the other of the sides, so as to finally slip off or be folded parallel with them to make a small package for shipment.

If desired, the corner or socket pieces 7 may be permanently attached to the end pieces, leaving the sides free to be inserted in setting the frame up or removed in knocking it down, or the said corner-pieces might be permanently secured to the side pieces 1 and 2, but in this event the brace 18 could not be readily removed therefrom, or the said corner-pieces might be secured the one to a side piece and the adjacent one at the opposite ends of the side piece to the end piece, thus leaving one end of the side piece free for the removal of the cross-brace, if desired.

The structure hereinabove shown and described admits of making the sides and ends of a suitable stiff wire or rod, while the corner-pieces may be cut from a simple piece of tubing, requiring no further handling save only the brazing thereon of the ear 8 when this is used for the attachment of the suspension-cord. This makes the support extremely simple to manufacture and quite inexpensive, while it has all of the advantages of stiffness, lightness, and durability.

What I claim is—

1. A canopy-supporting frame comprising side and end pieces, socket-pieces at the corners for connecting the sides and ends in removable adjustment, a center support, cords leading from the center support to the socket-pieces at the corners and a cross-brace attached to the side pieces and extending through the center support.

2. A canopy-supporting frame comprising side and end pieces consisting of wires or rods and having their adjacent ends turned at angles of forty-five degrees, socket-pieces consisting of tubes of substantially uniform diameter and adapted to receive the sides and ends, a center support, cords leading from the tubular socket-pieces to the center support and a cross-brace attached to the sides and engaged with the center support.

3. A canopy-supporting frame comprising side and end pieces and having their ends bent, tubular corner-pieces for receiving the bent ends of the side and end pieces, a central support comprising a hook and eyes formed upon opposite sides of its shank, suspension devices leading from the corner-pieces at one end to one of said eyes, suspension-cords leading from the corner-pieces of the opposite ends to the other of said eyes and a cross-brace engaged with the opposite side pieces and having a free sliding engagement with the central suspension device.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 7th day of May, 1903.

ISAAC E. PALMER.

Witnesses:
PAUL S. CARRIER,
CHAS. M. SAUER.